

Abstract

Carbon black, method of producing carbon black, and
device for implementing the method

The invention relates to a carbon black having an aggregate size distribution which has a $(d_{90}-d_{10})/d_{50}$ ratio of less than or equal to 1.1.

The carbon blacks are produced by admixing hot air if desired to a gas mixture comprising a carrier gas and a carbon black feedstock, passing the gas mixture into a burner pipe, burning the gas mixture at the burner pipe openings, and drawing the flames under suction, together with the ambient air drawn in freely under suction from the outside, through a cooled, narrowing gap, and carrying out cooling, the cooled, narrowing gap having a height (h) to width (b) ratio of 1-100, the width (b) being 0.5 to 10 mm, and the flow rate at the narrowest point of the gap being 10 - 200 m/s.

The carbon blacks of the invention can be used as non-reinforcing filler, reinforcing filler, UV stabilizer, conductive black, pigment or reducing agent.

Fig.1